

REMARKS

Favorable reconsideration of this application, as presently amended, and in light of the following discussion, is respectfully requested.

Claims 1-20 are presently pending in this application, Claims 1, 2,-6, 9-15, 17 and 19-20 having been amended by way of the present amendment.

In the outstanding Office Action, Claims 1-20 were rejected as being unpatentable over Furuhashi et al. (US Patent publication application number 10/0038498 A1).

In reply Applicants respectfully traverse the rejection because the Office Action has not made a *prima facie* case of obviousness.

The Office Action recognized that Furuhashi et al. does not show the surface of the mounting board with a plurality of holes for legs to be inserted, and that Furuhashi et al discloses the legs and engaging portions to be secured to the mounting board by screws. Despite these recognized differences, the Office Action asserts that it would have been obvious to someone of ordinary skill in the art at the time the invention was made to modify the structure of Furuhashi et al. to include a different structure that includes a plurality of holes for the purpose receiving legs therethrough for fastening the optical module to the mounting board.

There are three requirements for a *prima facie* case of obviousness: (1) the references must teach or suggest the modification, (2) there must be a reasonable expectation of success, and (3) the prior art must disclose all of the claim elements.

The MPEP cautions against using official notice (which apparently was the Office Action has done) unsupported by documentary evidence as a substitute for what is actually disclosed in the asserted prior art. Official notice should only be taken by the examiner

where the facts asserted to be well-known , or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known.¹

Comparing Claim 1 to Furuhashi et al., the claimed invention uses a self securing member to hold the optical member to the mounting board. In contrast, the optical module mounted body of Furuhashi et al. uses screws as separate, additional parts for securing the optical member to the mounting board. Claim 1 does not require flanges formed at the end of the legs for acting as a securing member, while the optical module mounted body of Furuhashi et al. needs to have such flanges for receiving screws. The optical module mounted body in the present invention of Claim 1 has holes on the mounting board through which engagement portions are inserted and resiliently engaged, while the optical module mounted body of Furuhashi et al. does not have the holes, nor the engagement portions that resiliently engage with the mounting board. These significant structural differences can not be ignored when making an "instant" substitution.

From a functional aspect, while fastening by screws taught by Furuhashi et al. would offer securing of the optical module on the mounting board more permanent, fastening by resilient engagement portions in the claimed invention offers securing so that optical module can be attached to or detached from the mounting board easier than Furuhashi et al.'s configuration.

Considering these aspects, fastening by resilient engagement portions in the claimed invention is substantially different, both structurally and functionally, from fastening by screws taught by Furuhashi et al.

Accordingly, a *prima facie* case of obviousness has not been established in the obviousness rejection, because the asserted prior art does not teach or suggest all of the elements of the claimed invention.

¹ MPEP 2144.03

As a practical matter, the problems with a structure like that used by Furuhashi et al. are described on pages 1-2 of the specification of the present application. The present inventors recognized that if the torque on the screws is not sufficient, the optical module and the mounting board are not properly in close contact with each other. It depends on human's skill without torque control machine.

On the contrary, fastening by resilient engagement portions in the claimed invention is also self-securing and thus does not rely on human skill nor use of a torque control machine.

The arguments for Claim 1 apply equally to Claims 2-16, although perhaps these claims are of differing scope and/or statutory class. Thus, Applicants believe rejections of Claims 1-16 are overcome.

As for the rejections to claims 17 and 18, claim 17 has been amended by way of the present amendment. As amended, the optical module mounted body has means for resiliently and removably securing the optical module to the means for mounting. Support for these means plus function claim elements is found in the various embodiments in the specification, such as the support member shown in Figure 1-7, for example.

Furuhashi et al. discloses a structure that relies on attachment screws, which is a completely different structure than that discussed above and does not perform the function of resiliently and removably securing the optical module to the mounting board. Consequently, because Furuhashi et al. does not disclose the "function" of the means plus function claim elements, the Office Action can fairly assert Furuhashi et al. as teaching these features.

Accordingly, Applicants believe that the obviousness rejections to claims 17 and 18 are hereby overcome.

As for obviousness rejections to claims 19 and 20, the Office Action failed to establish a *prima facie* case of obviousness, because Furuhashi et al. fails to show all of the

claimed elements.² The mounting board of the claimed invention has at least one heat conducting member embedded in a plate member and connecting continuously the mounting surface and undersurface of the plate member, whereas Furuhashi et al. never discloses such heat conducting member embedded in a plate member.

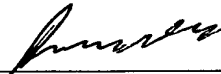
Accordingly, the rejections to claims 19 and 20 are believed to be overcome.

Please note that claim 19 has been amended to correct a typographical error, and Applicants believe the scope of this claim is unaltered by this amendment.

Consequently, the present application is believed to be in condition for formal allowance, and an early and favorable reconsideration of this application is therefore requested.

Respectfully submitted,

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² MPEP 2143.03